



PROCEEDINGS



ASIAN ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT FORUM:

Sharing International Experience on Environmental Compliance and Enforcement

Bangkok, Thailand
October 27-28, 2004



The United States Agency for International Development (USAID) and the Asian Development Bank (ADB) jointly funded the publication of this report.

Planning and Development Collaborative International (PADCO), an AECOM Company, completed the proceedings under USAID contract LAG-I-0099-00035-00. For PADCO, Elizabeth Rosan Kirkwood, Paul Violette, Lisa Kircher Lumbao and Watcharee Limanon prepared the report.

The authors' views expressed in this publication do not necessarily reflect the views of USAID, the United States Government or ADB.

In partnership with USAID, the Thailand Pollution Control Department (PCD) co-organized and hosted this regional forum on October 27-28, 2004 in Bangkok, Thailand to share international best practices on environmental compliance and enforcement and to explore strategies for establishing an Asian network.



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ACRONYMS

ADB	Asian Development Bank
AECEN	Asian Environment Compliance and Enforcement Network
ASEAN	Association of South East Asian Nations
APEC	Asia-Pacific Economic Cooperation
BERCEN	Balkan Environmental Regulatory Compliance and Enforcement Network
EPA	United States Environmental Protection Agency
IMPEL	EU Network for the Implementation and Enforcement of Environmental Law
INECE	International Network for Environmental Compliance and Enforcement
MONRE	Ministry of Natural Resources and Environment
NGO	Non-Government Organization
OECD	Organisation for Economic Co-operation and Development
PCD	Pollution Control Department of Thailand
REC	Regional Environmental Center for Central and Eastern Europe
REPIN	Regulatory Environmental Programme Implementation Network
SAARC	South Asian Association for Regional Cooperation
USAID	United States Agency for International Development
US-AEP	United States-Asia Environmental Partnership
UNEP	United Nations Environment Programme

Over the last decade, coping with the economic, social and health impacts of urban and industrial pollution has become a major challenge for Asian nations. In response, Asian policymakers have created new environmental laws and institutions that incorporate international environmental principles, such as polluter pays, and also established improved governance systems that promote access to information, public consultation and access to justice.

While each country has made considerable progress establishing environmental regulatory systems, much work still remains in strengthening environmental compliance and enforcement. Throughout the region, governments have identified enforcement as a top priority, and are working to develop new solutions that both expand existing command-and-control capabilities and leverage community and market forces to help address technical, financial and human resource limitations.

US-AEP Environmental Regulatory Dialogue

Since 2000, the U.S.-Asia Environmental Partnership (US-AEP), a program of the United States Agency for International Development (USAID), has been working closely with Asian governments through its Environmental Regulatory Dialogue program to promote improved compliance and enforcement in Asia through country counterpart exchange. While each nation is at a different stage in policy development based on individual legal, institutional, political and social factors, all have a strong interest in exchange with Asian and U.S. counterparts.

Establishing a Practitioner Network in Asia

Environmental compliance and enforcement practitioner networks have proven effective mechanisms for promoting implementation of environmental laws, addressing transboundary pollution challenges and supporting economic integration and harmonization. Practitioner networks provide a mechanism for agency officials, prosecutors, judges, civil society leaders and others to exchange ideas and experience in developing new policies and practices and in building improved capacity.

Recognizing the need for a more comprehensive approach to compliance and enforcement, US-AEP and other donors decided to explore the benefits of operating an Asian practitioner network based in part on experience developed through the US-AEP Environmental Regulatory Dialogue program. As a first step in evaluating country interest and the potential benefits of an Asian network, US-AEP worked with agency partners in India, Philippines and Thailand to assess their environmental compliance and enforcement programs.

Country Program Assessment Results

Results from the three-country environmental compliance and enforcement program assessments identify common challenges, which provide a basis for regional exchange on compliance and enforcement. Common program challenges identified by the assessment results included: (1) overlapping and fragmented authority; (2) incomplete decentralization; (3) limited interagency coordination; (4) lack of standardized procedures; (5) weak human and institutional capacity; (6) limited public involvement; and (7) insufficient data and performance indicators.

In addition, partner agencies from India, the Philippines and Thailand developed recommendations for short-term and long-term reform measures aimed at strengthening environmental compliance and enforcement. Proposed short-term measures would enable the agencies to rely on existing legal authority to promote change, while long-term measures would require more comprehensive legal or institutional reforms.

Asian Environmental Compliance and Enforcement Forum

To gauge interest and explore strategies for establishing an Asian network, US-AEP and the Thailand Pollution Control Department (PCD) organized a regional forum on October 27 and 28, 2004 in Bangkok, Thailand for senior Asian environmental officials and other stakeholders from Europe and the United States. Participating Asian countries included China, Indonesia, India, Philippines, Sri Lanka, Thailand and Vietnam.

Over 80 participants joined the forum, including senior environmental officials, judges, lawyers and civil society leaders, as well as representatives from the U.S. Environmental Protection Agency (EPA), Asian Development Bank (ADB), World Bank, Organisation for Economic Co-operation and Development (OECD), International Network for Environmental Compliance and Enforcement (INECE) and Regional Environmental Center for Central and Eastern Europe (REC).

At the forum, participants unanimously endorsed the regional network and set an action agenda for its establishment that identified network objectives and activities, priority program areas, scope of implementation and organizational requirements. In addition, forum presentations and discussion included compliance and enforcement best practices, program indicators and lessons learned from other practitioner networks.

Action Agenda: Establishing an Asian Network

To gain insights into requirements and priorities for establishing a network in Asia, forum participants completed a questionnaire and joined facilitated discussions. Taken together, these recommendations form an action agenda for use by countries and donor partners in moving forward to establish an environmental compliance and enforcement network in Asia.

Objectives and Activities

The action agenda identified three main objectives and associated activities for the proposed environmental compliance and enforcement network: (1) promote the development and implementation of improved policies and institutions; (2) strengthen practitioner capacity; and (3) support regional sharing of best practices on compliance and enforcement.

As indicated in the table below, potential network activities would include: annual forum, pilot projects for new policies, regulations and procedures; assessments and studies; performance indicator development and tracking; practitioner trainings and tools; peer exchanges; website, publications and information databases; and linkages to other networks.

Network Objectives and Potential Activities

Objectives	Potential Activities
1. Promote the development and implementation of improved policies and institutions	<ul style="list-style-type: none">• Pilot projects for new policies, regulations and procedures• Regional program assessments and studies• Performance indicator development and tracking• Regional guiding principles
2. Strengthen practitioner capacity	<ul style="list-style-type: none">• Specialized practitioner trainings and tools• Performance indicator development and tracking• Peer exchanges
3. Support regional sharing of best practices on compliance and enforcement	<ul style="list-style-type: none">• Annual forum• Peer exchanges• Website, publications and information databases• Linkages to other networks

Priority Program Areas

The action agenda identified the following top priority areas for network activities: (1) enforcement policies and authority; (2) institutional arrangements and decentralization; (3) compliance assurance; (4) self-monitoring, self-reporting, record-keeping; (5) public participation; and (6) economic instruments.

Scope of Implementation

Participants confirmed that while network activities should focus primarily on improved implementation of domestic legal requirements, the network should also include activities that address transboundary pollution. In addition, the network should not work exclusively on urban and industrial environmental impacts, but, where practical, should include natural resources or coastal zone impacts and management.

Organizational Requirements

In discussions on establishing and operating an Asian practitioner network, participants identified four primary organizational requirements: (1) country membership; (2) national coordinators; (3) executive committee; and (4) secretariat.

Asian Environmental Compliance and Enforcement Network (AECEN)

Representatives from PCD, US-AEP, ADB and OECD offered concluding remarks at the regional forum, affirming their commitment to support the establishment of the Asian Environmental Compliance and Enforcement Network (AECEN). While USAID will continue its support of this activity, ADB also committed to providing additional core funding to support network establishment and activity implementation.

As a next step, partner countries, donor agencies and networks will work together to begin implementation of the proposed action agenda, including establishing an interim executive committee to guide development of the network terms of reference, and support planning of a launching workshop in 2005 in Manila. The interim executive committee will invite new member countries and other donor partners to join AECEN.

introduction

Environmental Compliance and Enforcement as Top Priority

Over the last decade, coping with the economic, social and health impacts of urban and industrial pollution has become a major challenge for Asian nations. In response, Asian policymakers have created new environmental laws and institutions that incorporate international environmental principles, such as polluter pays, and also established improved governance systems that promote access to information, public consultation and access to justice.

While each country has made considerable progress establishing environmental regulatory systems, much work still remains in strengthening environmental compliance and enforcement. Throughout the region, governments have identified enforcement as a top priority, and are working to develop new solutions that both expand existing command-and-control capabilities and leverage community and market forces to help address technical, financial and human resource limitations.

US-AEP Environmental Regulatory Dialogue

Since 2000, the U.S.-Asia Environmental Partnership (US-AEP), a program of the United States Agency for International Development (USAID), has been implementing its Environmental Regulatory Dialogue program in partnership with the U.S. Environmental Protection Agency (EPA) to promote the adoption and implementation of improved environmental laws, policies and institutional arrangements in Asia. US-AEP countries include India, Indonesia, Philippines, Sri Lanka, Thailand and Vietnam.

Core program areas include:

- Compliance and enforcement
- Community and citizen participation
- Environmental law and governance
- Economic instruments and environmental funds

The cornerstone of the Environmental Regulatory Dialogue program is counterpart exchange particularly between countries in the region. While each country is at a different stage in policy development due to legal, institutional, political and social factors, all have a strong interest in exchange with Asian and U.S. counterparts. Partners include government agency officials, legislators, judges, communities, and civil society and business leaders.

“Through the United States-Asia Environmental Partnership, the United States Agency for International Development and the United States Environmental Protection Agency work in partnership with government agencies, legislatures, cities, communities and courts to strengthen environmental laws and institutions. These collaborative partnerships have led to a new clean water act in the Philippines, an environmental fund in Vietnam and an environmental dispute resolution center here in Thailand.”

H.E. Darryl N. Johnson
U.S. Ambassador to Thailand

Under the Environmental Regulatory Dialogue program, US-AEP has worked with partners in multi-year projects through a partnership approach that includes:

1. Identifying country priorities and comparative advantages;
2. Providing technical assistance to help formulate new policies, laws, regulations and institutions;
3. Facilitating technical exchange and dialogue with counterparts;
4. Implementing pilot projects to achieve results on the ground; and
5. Supporting policy implementation through training and skills development.

Table I highlights recent policy and institutional advances developed in part through counterpart exchange under the US-AEP Environmental Regulatory Dialogue program.

Table I
US-AEP Environmental Regulatory Dialogue: Catalyzing Policy and Institutional Advances

Country	Policy Advance / Institution	Partner Countries
Thailand	Environmental chambers (“green benches”) in courts	India
Philippines	Decentralization of agency environmental adjudication	United States
Thailand	Environmental dispute prevention and resolution	United States, Philippines
Thailand	Public consultation in environmental decision-making	United States
Vietnam	Community participation in watershed protection	Philippines, Thailand
Thailand	Self-monitoring regulation for industrial sources	United States, Taiwan
Philippines	Water quality permitting	United States, Taiwan
Vietnam	Wastewater pollution charges	Philippines, Malaysia
Vietnam	Environment funds	Thailand, Poland

Establishing a Practitioner Network in Asia

To expand on current US-AEP efforts to promote compliance and enforcement in the region, US-AEP and other donor partners explored the benefits of establishing a practitioner network. While there are international and regional networks that address specific country needs and interests, there is currently no network in Asia (see Table 6).

International and regional practitioner networks have proven to be effective strategies for promoting improved environmental compliance and enforcement, addressing trans-boundary pollution challenges and supporting economic integration and harmonization.

Regional practitioner networks provide a mechanism for agency officials, prosecutors, judges, civil society leaders and others to exchange ideas and experience in developing new policies and practices, and building improved capacity.

Assessing Compliance and Enforcement Programs in Asia

As a first step in evaluating practitioner interest and the potential benefits of establishing a network in Asia, US-AEP worked with agency partners in India, Philippines and Thailand to assess their environmental compliance and enforcement programs. US-AEP partnered with agency officials and other stakeholders in each country to complete a questionnaire, identify program strengths and weaknesses and develop recommendations for improving environmental policies and practices, and building institutional capacity.

Asian Environmental Compliance and Enforcement Forum

To explore strategies for creating an Asian practitioner network, share country program assessment results, and present innovative strategies and pilot activities for strengthening environmental compliance and enforcement, US-AEP and the Thailand Pollution Control Department (PCD) convened a regional forum on October 27 and 28, 2004 in Bangkok, Thailand for senior Asian environmental officials and other stakeholders.

Over 80 participants attended this program, including senior environmental officials, judges, lawyers and civil society leaders from China, Europe, Indonesia, India, Philippines, Sri Lanka, Thailand, United States and Vietnam, as well as representatives from the Asian Development Bank (ADB), World Bank, Organisation for Economic Co-operation and Development (OECD), International Network for Environmental Compliance and Enforcement (INECE) and Regional Environmental Center for Central and Eastern Europe (REC). (See Appendix I for workshop agenda.)

As a result of group discussions, participants unanimously endorsed the establishment of a regional network dedicated to promoting environmental compliance and enforcement in Asia. As a first step in establishing this new regional practitioner network, participants identified network objectives and activities, priority program areas, scope of implementation and potential organizational arrangements.

Outline of Proceedings

The forum proceedings provide a summary of assessment findings and workshop proceedings in three parts:

Part 1: Country Program Assessment Results

Provides a summary of the country program assessment results, including regional program challenges and short- and long-term recommendations for each surveyed country.

Part 2: Regional Forum Proceedings

Presents highlights and outcomes of case study presentations and group discussions.

Part 3: Action Agenda on Establishing an Asian Network

Outlines an action agenda developed by participants for establishing a practitioner network dedicated to environmental compliance and enforcement.

country program assessment results

part I

To gain a preliminary understanding of the potential need for a regional compliance and enforcement practitioner network, US-AEP worked with partner environmental agencies in India, Philippines and Thailand in 2004 to complete an assessment of each country's environmental compliance and enforcement program. US-AEP developed the survey based in part on U.S. EPA's *Principles of Environmental Enforcement*. Successful environmental compliance and enforcement programs share common principles and practices that contribute to their effectiveness and long-term sustainability (see Table 2).

Table 2
Principles of Effective Compliance and Enforcement Programs

- Make compliance and enforcement a government priority
- Establish enforceable legal and regulatory requirements
- Determine the optimal degree of centralization and establish clear roles and responsibilities
- Optimize use of limited resources and information by targeting priority sectors and pollution hot spots
- Evaluate relative importance of compliance promotion versus enforcement response to violations based on economic, social and cultural factors
- Strengthen human and institutional capacity to meet program needs and priorities
- Develop standardized compliance assurance procedures to promote transparent, effective and fair program implementation
- Apply incentive-based approaches that include pollution charges, public disclosure and financing programs that complement regulatory measures
- Leverage public participation to encourage compliance and promote community involvement
- Develop effective data collection and information management systems
- Evaluate program success with indicators that monitor operations to promote accountability and improve program performance

Assessment Methodology, Objectives and Focus Areas

To complete the assessment survey, agency officials and practitioners in the three countries provided written responses to a questionnaire, followed by interviews with US-AEP. Together, agency partners and US-AEP completed the survey report, which was presented at the regional workshop.

The **objectives of this three-country assessment** were to:

- Identify country compliance and enforcement program capabilities and limitations;
- Develop recommendations for improved laws, institutions, procedures and practices and strengthened capacity; and
- Identify common challenges to provide a basis for regional dialogue.

1

“Our most pressing challenge is finding ways to create solutions within the existing legal and institutional framework. In my experience, too often government officials find it too easy to cite limitations in laws or institutional arrangements, rather than to develop solutions within the constraints of our existing systems. We have enough law, but not enough law enforcement.”

Mr. Petipong Pungbun
Na Ayudhya,
Permanent Secretary of
Thailand's Ministry of
Natural Resources
and Environment (MoNRE)

The assessment survey addressed **six primary components** of environmental compliance and enforcement programs:

1. Legal authority and institutional arrangements;
2. Compliance monitoring – inspections, self-monitoring, permitting;
3. Compliance assistance and data management;
4. Enforcement response;
5. Public participation and economic instruments; and
6. Compliance and enforcement program indicators.

Regional Compliance and Enforcement Program Challenges

Assessment results from the three countries reveal common challenges, which provide a basis for regional exchange on compliance and enforcement (see *Table 3*).

Table 3
Common Program Challenges

Overlapping and fragmented authority	Due to complex legal arrangements or political factors, multiple agencies are responsible for compliance and enforcement.
Incomplete decentralization	While national laws and policies require decentralization of compliance and enforcement functions, implementation has been incomplete and many functions still remain with central government agencies.
Limited interagency coordination	With multiple agencies responsible for promoting compliance and enforcement, there is often limited interagency coordination and cooperation.
Lack of standardized procedures	Agencies have been slow to develop clear procedures to support source monitoring, inspection, and enforcement.
Limited capacity	Environmental agencies at central, regional and local levels do not have the necessary human and institutional capacity to meet all legal mandates and administrative responsibilities.
Limited public involvement	While citizen participation is recognized as a critical factor in assisting agencies to monitor compliance and enforcement requirements, agencies lack the necessary resources to promote effective public participation.
Insufficient data and performance indicators	Insufficient data or data management systems limit agency ability to implement effective compliance and enforcement programs, or measure the outcomes or impacts of these programs.

Short-Term and Long-Term Recommendations

Based on the assessment survey, each country developed recommendations for short-term and long-term reform measures aimed at strengthening environmental compliance and enforcement. Proposed short-term measures would enable the agencies to rely on existing legal authority to promote change, while long-term measures would require more comprehensive legal or institutional reforms. *Table 4* provides a summary of each country's recommendations.

Table 4
Country Program Assessment Recommendations

Country	Short-term recommendations	Long-term recommendations
THAILAND	<ul style="list-style-type: none"> • Exercising existing compliance and enforcement authority; • Strengthening overall interagency coordination and cooperation; • Developing uniform compliance monitoring and enforcement procedures to promote decentralization and consistency; • Establishing strategic outreach programs for the regulated community; • Strengthening overall public participation by providing access to information and by publicizing enforcement stories; • Increasing environmental knowledge and expertise at all government levels; and • Developing environmental compliance and enforcement indicators to measure performance. 	<ul style="list-style-type: none"> • Legal reform to establish a single ministry responsible for compliance and enforcement; • Decentralization to empower regional, provincial and local officials with increased enforcement responsibilities and functions; • Creative financing arrangements and/or economic incentives to encourage compliance; and • Amended laws and polices to promote public participation and to establish meaningful sanctions that deter potential violators.
PHILIPPINES	<ul style="list-style-type: none"> • Completing the reorganization of the Environmental Management Bureau (EMB); • Completing and implementing a multimedia, industry-specific checklist system for monitoring and inspections; • Optimizing use of self-monitoring reports; • Incorporating improved and feasible enforcement measures within the implementing rules and regulations of the Clean Water Act; and • Conducting pilot testing on the decentralization of the Pollution Adjudication Board (PAB). 	<ul style="list-style-type: none"> • Improved policies and procedures to clarify/ specify roles of national agencies and local governments, consistent with devolution of powers and authorities to local governments under recent laws; • Development and implementation of economic instruments to encourage compliance and generate funds for monitoring and enforcement; and • Expanded PAB jurisdiction to include all types of pollution cases and not only violations of standards.
INDIA	<ul style="list-style-type: none"> • Improving inter-governmental cooperation; • Developing standard policies and procedures for compliance monitoring and enforcement response; • Developing self-monitoring regulations to shift the burden to the regulated community; • Strengthening staff capacity in compliance and enforcement efforts; • Increasing the Central Pollution Control Board's (CPCB) outreach capacity; • Improving access to information and promoting improved public participation; • Establishing standardized indicators for program performance evaluation; and • Strengthening information management systems. 	<ul style="list-style-type: none"> • Procedures to eliminate overlap between the Air Act, Water Act and the Environmental Protection Act; • Improved institutional arrangements to better coordinate CPCB and State Pollution Control Boards (SPCBs); • Amended laws empowering enforcement agencies to introduce incentive-based instruments; • Expanded scope for Appellate Authorities to avoid proliferation of public interest litigation; • Increased financial assistance and incentives for improved compliance; and • Amended laws to introduce carbon emission taxes and include alternative dispute resolution (ADR) mechanisms.

To explore strategies for creating an Asian practitioner network, US-AEP and the Thailand Pollution Control Department (PCD) convened a regional forum on October 27 and 28, 2004 in Bangkok, Thailand. Over 80 participants attended this two-day program, including senior officials, judges, lawyers and civil society leaders from China, Europe, Indonesia, India, Philippines, Sri Lanka, Thailand, United States and Vietnam, as well as representatives from ADB, World Bank, OECD, INECE and REC.

Primary forum objectives included:

- Sharing country program assessment results;
- Presenting innovative strategies and pilot activities for strengthening environmental compliance and enforcement in the region; and
- Exploring strategies for establish a regional practitioner network.

As detailed in the program agenda (*Appendix 1*), in addition to country program assessment results, forum presentations and discussion included three main areas:

- Compliance and enforcement best practices;
- Compliance and enforcement program indicators; and
- Lessons learned from other practitioner networks.

“Cooperation is at the heart of protecting our environment. If there is any lesson from the last three decades, it is this: Government officials, judges, big city mayors, local village leaders, news reporters, common citizens and even school children all have a role to play, and must work together... Through our actions and our decisions, we must light the way with new ideas that reach all parts of our societies, and create new ways to work together to protect our natural heritage.”

Justice Vijender Jain,
Delhi High Court, India



Distinguished guest speakers at the workshop, from left: Mr. James Waller, Regional Environmental Affairs Officer; H.E. Mr. Darryl N. Johnson, U.S. Ambassador to Thailand; Justice Jain, Delhi High Court, India; and Mr. Petipong Pungbun Na Ayudhya, Permanent Secretary of Thailand's Ministry of Natural Resources and Environment.



Workshop Participants

In addition, as detailed in Part 3, participants shared experience and ideas on strategies and requirements for establishing a regional practitioner network for Asia.

A. Regional Best Practices on Environmental Compliance and Enforcement

Based in part on the assessment results, workshop presentations focused on four core areas of environmental compliance and enforcement: (1) permitting, monitoring and inspection; (2) institutional arrangements and decentralization; (3) enforcement actions and responses; and (4) economic instruments and other incentive-based approaches. Presentations highlighted individual country successes, while panel discussions addressed implementation challenges.

I. Permitting, Monitoring, and Inspection Policies and Practices

Compliance monitoring is essential to detecting and correcting violations, providing evidence to support enforcement actions, promoting deterrence and evaluating overall program progress. The most important tools and methods for compliance monitoring include: (1) inspections; (2) information collection requests; (3) self-monitoring/self-reporting; (4) citizen monitoring/complaints; and (5) area monitoring of ambient conditions. At the forum, environmental agencies in Thailand and the Philippines presented progress on pilot activities completed in 2004 in partnership with US-AEP and EPA.

Thailand

Development of New Self-Monitoring and Self-Reporting Regulations

Mr. Burachatr Akkaraporn, Environmental Inspector, Pollution Control Department

Thailand has developed draft regulations for selected industries on self-monitoring, self-reporting and recordkeeping to provide access to performance information, reduce enforcement costs and better inform the regulated community about compliance requirements. PCD initiated this project by hosting two separate workshops to secure stakeholder input from regulatory agencies, industry and civil society, as well as technical expertise from international experts in India, Philippines, Taiwan, Vietnam and the U.S.

In developing this proposed regulation, PCD faced challenges in creating comprehensive reporting forms and gaining cooperation and support from the regulated community and local governments. In 2005, PCD will pilot test its draft self-monitoring regulations for specific water and air parameters on a voluntary basis with target industries located in Bangkok and neighboring provinces.

Philippines

Use of Inspection Checklists for Strengthening Compliance, Monitoring and Enforcement

Mr. Virgilio Fabronero, Chief of Pollution Control Division, Region 6, Environmental Management Bureau, Department of Environment and Natural Resources

To strengthen enforcement, standardizing compliance assurance procedures is a top priority of the Environmental Management Bureau (EMB). In 2004, EMB Region 6 pilot tested an inspection checklist to improve and standardize their inspection process. The objectives of the checklist were to assist inspectors with identifying vital information for their narrative reports, determine compliance with specific permit conditions, standards and existing regulations, and target individual violators or sectors for noncompliance.

During the three-month pilot, EMB concluded that industry-specific checklists helped inspectors: (1) improve inspection reports, especially for air and water; (2) eliminate the practice of putting permit information “on file;” (3) identify facility expansions with the required list of equipment information; and (4) provide substantive data for use in the emissions inventory.

As a next step, EMB Region 6 recommended developing other industry-specific checklists for industries like electroplating, cement and pulp and paper factories, drafting an inspection manual and establishing an agency-wide regulation mandating the use of checklists to guide all environmental inspections.



From left: Mr. Nathan Sage, US-AEP Country Manager Vietnam; Ms. Mamie Miller, Chief, Air Compliance Branch, US EPA; Mr. Paul Violette, Senior Policy Advisor, US-AEP; Mr. Ceazar Natividad, Engineer, Laguna Lake Development Authority.

■ 2. Institutional Arrangements and Decentralization Efforts

Promoting effective compliance with environmental requirements requires strong coordination among implementing agencies at the national, regional and local levels. In Asia, governments are moving to decentralize environmental compliance and enforcement functions and responsibilities, since sub-national and local authorities often are closer to environmental problems and can respond more quickly. Presentations from Sri Lanka and China addressed strategies adopted in decentralizing core environmental compliance and enforcement functions.

Sri Lanka

Central Environmental Authority of Sri Lanka and its Role in Environmental Management

Ms. Manel Jayamanna, Director General, Central Environmental Authority

In 2004, Sri Lanka's Central Environmental Authority (CEA) initiated an effort to decentralize environmental functions to address environmental impacts brought about by rapid economic growth. Central to this effort was the creation of four sub-regional offices with core environmental responsibilities, including: implementing and enforcing laws at the regional level; establishing regional environmental priorities and programs; partnering and liaising with provincial and local governments; coordinating and resolving environmental impact assessment issues; and promoting public awareness and education of environmental issues.

In implementing this program, CEA faced several challenges. In particular, decentralization was hampered by limited resources (human, technical and financial), weak inter-agency communication and coordination, unclear guidelines for standard operating procedures and limited institutional structures to support regional offices. Despite these challenges, CEA remains optimistic and open to new ideas as it moves forward in implementing agency decentralization requirements.

China

Strengthening State-Level Enforcement Capabilities

Mr. Chen Shanrong, Deputy Director General, State Environmental Protection Administration

China's main environmental law, the Environmental Protection Law, grants the State Environmental Protection Administration (SEPA) and its partners at the provincial, city and county levels primary enforcement authority. Decentralization efforts are under way to promote improved compliance and inspection at the local level, since the majority of China's 45,000 inspectors work for the city and provincial EPAs.

To help strengthen environmental enforcement at the sub-national levels, inspectors are receiving more regular staff training and working with upgraded technical equipment and tools to conduct inspections. In addition, on-site inspection practices are improving with new standardized procedures, public disclosure efforts, more stringent environmental discharge standards and increased penalties.

With enhanced state and local-level capabilities, SEPA is developing an environmental public disclosure system in the cities of Huhhot and Zhenjiang. Under this program, inspectors rate the environmental performance of facilities using a color rating system and then disclose results to the mass media. Green, for example, indicates the facility has achieved international environmental standards, while black implies the facility must

alter its actions because it seriously violates both national and local environmental standards. As a result of this program, polluting enterprises are under increasing pressure to clean up their operations. Given this success, the program is now being piloted in more than 30 cities across China.

■ 3. Enforcement Actions and Responses

Enforcement actions are essential to ensuring compliance, correcting violations and redressing harm. In addition, regular enforcement practices promote predictability within the regulated community and help strengthen an agency's credibility. Effective enforcement actions also remove the economic benefit of non-compliance, thereby leveling the playing field and establishing a deterrent effect among industry. Ultimately, a strong enforcement program should result in pollution prevention and waste minimization and lead to overall environmental improvements. Presentations from the Philippines and India illustrated various effective enforcement strategies.

Philippines

Strengthening Enforcement Response in Laguna de Bay

Mr. Ceazar Natividad, Engineer, Laguna Lake Development Authority, DENR

In the face of increased agricultural and industrial pollution entering Laguna Lake – the largest lake in the Philippines – the Laguna Lake Development Authority (LLDA) developed a discharge permit system based on environmental user fees (i.e., pollution charges) and aggressively enforced permit violations. For industrial users, LLDA discharge permits for biological oxygen demand (BOD) include a fixed fee and a variable fee based on the amount of pollution discharged. As a condition of each permit, facilities must comply with effluent standards, submit quarterly self-monitoring reports to LLDA, use flow measuring devices and appoint an accredited pollution control officer to conduct compliance monitoring for the facility.

To ensure facilities comply with permit requirements, LLDA has applied a range of enforcement responses, including issuing notices of violation and cease and desist orders, collecting monetary penalties and closing down facilities. LLDA has also established an administrative review board to adjudicate complaints against agency decisions. As a direct result of LLDA's permitting and enforcement program, BOD levels due to industrial pollution in the lake have declined significantly. The industrial sector now only constitutes 19 percent of the BOD loading compared to 30 percent in 1996.

India

Public Interest Litigation in India

Mr. Amarjit Singh Chandhiok, Asia Pacific Jurist Association

Public interest litigation (PIL) in India has evolved as a key judicial strategy to provide access to justice for all citizens and to protect against environmental degradation. Based on the Constitution, the Supreme Court and High Courts of India have relaxed standing requirements for environmental cases so that a citizen or public interest group can file a complaint on behalf of a disadvantaged class of persons without having suffered a specific legal injury or harm themselves.

The Supreme Court and a number of High Courts in major cities, including Mumbai, Kolkata, Chennai and Gujarat, have established "green benches" to adjudicate environmental cases. These activist courts have ruled on important environmental cases involving gas leaks, forest encroachment, pollution and traffic regulations. In one well-known case, courts established a remedy for protecting the Taj Mahal from harmful air pollutants by relocating industrial facilities and regulating the use of vehicles.

■ 4. Economic Instruments and Other Incentive-Based Approaches

As a complement to traditional command-and-control regulations, governments in Asia are developing new strategies that leverage economic instruments and other incentives in promoting environmental compliance. Examples of approaches that leverage community and market forces include pollution charges, tradable permits, subsidies, offset approaches, tax incentives and subsidies, environmental labeling and public disclosure. Indonesia and Vietnam are implementing new strategies that illustrate the effectiveness of these approaches.

Indonesia

Promoting Compliance through Public Disclosure

Mrs. Hermien Roosita, Assistant Deputy for Manufacturing, Infrastructure and Service Affairs, Ministry of Environment

As part of a government initiative to promote improved environmental compliance, the Indonesian Ministry of Environment re-launched a public disclosure environmental rating system in 2003 called PROPER (Program for Pollution Control and Rating Evaluation). The main objectives of this program are to: (1) improve compliance with environmental regulations; (2) reduce air, water and hazardous waste pollution through cleaner technologies; and (3) encourage polluters to adopt environmental management systems, resource management policies and international standards, such as ISO certification.

PROPER's five-color rating scheme – gold, green, blue, red and black – has proven to be a simple and effective method for communicating a facility's environmental performance to the public. PROPER assesses all aspects of a company's environmental management system, relationship with the community, and compliance with water, air pollution, waste and planning requirements. A gold rating indicates near zero emission levels, while black signifies no pollution controls at all. Agency officials refer companies with black ratings to environmental law enforcement officials.

Implementation of this approach relies on strong provincial and local participation to monitor, sample and evaluate emission and effluent data on facilities, and an on-going communication strategy to disclose company ratings to the public. To date, PROPER has sent a clear message to polluters; in just two years, the number of facilities with a black rating has dropped from 40 percent to 4 percent.



Experts from other international environmental and compliance networks share their experiences. From left: Mr. Paul Violette, Senior Policy Advisor, US-AEP; Mr. Mihail Dimovski, BERCEN Secretariat; Ms. Angela Bularga, OECD/REPIN Secretariat; Mr. Ken Markowitz, INECE Secretariat.

Vietnam

Launching a National Wastewater Pollution Charge System

Mrs. Nguyen Thi Kim Dzung, Principal Economic Research Fellow, Central Institute for Economic Management

To promote compliance with environmental standards and encourage facilities to adopt cleaner technologies, in January 2004 Vietnam enacted Prime Ministerial Decree 67, requiring industrial and domestic polluters to pay a fee for wastewater discharges. Following consultations with provincial departments and industrial polluters, the Ministry of Finance and the Ministry of Natural Resources and Environment issued a government circular defining the pollution charge program procedures, which will be implemented in large part by provincial and city agencies.

In particular, implementing agencies are required to collect fees from industries based on a sectoral analysis of pollutant loads and self-reported performance information. In accordance with the decree, a percentage of pollution charge revenues will be directed to a national-level environmental fund to enable new environmental investments to businesses through loans and grants.

Provinces or cities with existing revolving funds, such as Hanoi, can use their revenues to make local environmental investments. As this program is further implemented, the environmental protection fees will be based on actual discharged amounts and pollution concentrations rather than estimated amounts.



H.E. Darryl N. Johnson, U.S. Ambassador to Thailand, discusses the importance of regional partnerships in an interview with the Thai Press.

B. Environmental Compliance and Enforcement Program Indicators

Developing and tracking program indicators enables decision-makers to evaluate compliance and enforcement program effectiveness, and to make more informed management decisions on program implementation. To assist countries in promoting improved compliance, practitioner networks typically work with members to develop and track performance indicators. As part of the forum, experts from INECE and EPA presented information and experience on performance indicators.

Performance Indicators for Environmental Enforcement and Compliance Programs

Mr. Kenneth Markowitz, INECE Secretariat

Performance indicators are a key tool for decision-makers developing and implementing environmental compliance and enforcement programs. Indicators allow decision-makers to: (1) monitor and control the program operations; (2) ensure accountability to legislative bodies, budget authorities, constituent groups and the public; and (3) improve overall program performance.

Many environmental authorities commonly evaluate their enforcement capabilities and activities with input and output indicators. Input indicators track financial and human resources allocations (i.e., staff, funding, materials), while output indicators describe particular activities, such as the number of enforcement cases or the number of fines issued per year. While these traditional indicators provide some measure of program activities, they do not capture program results or impacts (see *Table 5*).

As a result, countries are increasingly developing program indicators that measure intermediate and final outcomes. Intermediate outcome indicators measure changes in knowledge, behavior or conditions that result from program activities, while end outcome indicators aim to measure overall environmental improvements related to compliance and enforcement efforts. Experience in developing such indicators is expanding rapidly as more and more countries with transitional and emerging economies are launching pilot programs on environmental compliance and enforcement indicators.

Table 5
Types of Performance Indicators

Type of Indicator	What it Measures	Examples
Input	Resources	<ul style="list-style-type: none">• Personnel• Funds for salaries, contracts, IT, etc.
Output	Activities	<ul style="list-style-type: none">• Inspections conducted• Enforcement actions taken• Fines assessed
Intermediate Outcome	Behavior Change	<ul style="list-style-type: none">• Greater understanding of how to comply• Improved facility management practices• Increased compliance
Final Outcome	Environmental Impact	<ul style="list-style-type: none">• Reduced pollution emissions• Improved ambient water quality• Reduced contaminant burden in wildlife species

Table 6
Environmental Compliance and Enforcement Practitioner Networks

	IMPEL (1992)	REPIN (1999)	BERCEN (2001)	INECE (1989)
Mission	<p>EU Network for the Implementation and Enforcement of Environmental Law europa.eu.int/comm/environment/impel/</p> <p>To protect the environment by the effective implementation of European law.</p>	<p>Regulatory Environmental Programme Implementation Network www.oecd.org</p> <p>To enable environmental authorities and other stakeholders in Eastern Europe Caucasus and Central Asia (EECCA) countries to provide protection of the environment and human health by developing and implementing environmentally effective, economically efficient environmental policies and legislation, and ensuring compliance with environmental requirements.</p>	<p>Balkan Environmental Regulatory Compliance and Enforcement Network www.rec.org</p> <p>To increase the effectiveness of enforcement agencies and promote compliance with environmental requirements.</p>	<p>International Network for Environmental Compliance and Enforcement www.inece.org</p> <p>To contribute to a healthy and clean environment, sustainable use of natural resources and the protection of ecosystem integrity through effective compliance and enforcement of environmental laws using regulatory and non-regulatory approaches.</p>
Member Countries / Region	<p>29 countries: all Member States of the European Union (EU); 10 future Member States; 3 candidate countries: Bulgaria, Romania and Turkey; and Norway, European Commission (Region: EU)</p>	<p>Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan (Region: EECCA)</p>	<p>Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Serbia and Montenegro, and Bulgaria and Romania are permanent observers (Region: South Eastern Europe (SEE))</p>	<p>2,500 members, including USEPA, Netherlands, BERCEN, IMPEL, REPIN, European Commission (Region: Global)</p>
Organizational Structure	<ul style="list-style-type: none"> • Secretariat (housed at EU's Environmental Directorate General Office in Brussels) • Member States • National Coordinators • 2 plenary meetings/year co-chaired by the European Commission 	<ul style="list-style-type: none"> • Secretariat (housed at OECD in Paris) • Member countries • National Coordinators • 1 plenary meeting/year 	<ul style="list-style-type: none"> • Secretariat (housed at the Regional Environmental Center (REC) in Szentendre, Hungary) • Member countries • National Network Coordinators • At least 1 plenary meeting/year co-chaired by the European Commission and the REC 	<ul style="list-style-type: none"> • Secretariat (housed at Earthpace in Washington DC) • Executive Planning Committee (EPC) • 1 plenary meeting/year • International Conferences every 2-3 years • "Network of networks"
Work Programs and Activities	<p>IMPEL's two programmatic areas include:</p> <ol style="list-style-type: none"> 1. The Minimum Criteria for Inspections Programme includes trainings and publications on general principles, best practices for environmental inspectors. 2. The Permitting and Monitoring Programme under the 6th Environmental Action Programme aims to improve compliance monitoring and permitting legislation and implementation practices. 	<p>REPIN's three programmatic areas include:</p> <ol style="list-style-type: none"> 1. Strengthening Environmental Policy Instruments <ul style="list-style-type: none"> • permitting, standards, reform 2. Strengthening Environmental Enforcement Instruments <ul style="list-style-type: none"> • economic and financial aspects of compliance assurance policies 3. Strengthening Capacity of Environmental Agencies <ul style="list-style-type: none"> • indicators, peer reviews 	<p>Main BERCEN activities concern training of environmental inspectors and exchange of experience through exchange programs, study tours, peer review assessments, national trainings and participation in other networks.</p>	<p>INECE's work centers on (1) developing networks for enforcement cooperation, (2) strengthening capacity for compliance and enforcement, and (3) raising awareness of the importance of environmental compliance and enforcement. Key INECE activities include:</p> <ul style="list-style-type: none"> • Organize international conferences on environmental compliance and enforcement • Develop Environmental Compliance and Enforcement (ECE) Indicators • Update website

C. Lessons Learned from Compliance and Enforcement Practitioner Networks

Environmental compliance and enforcement practitioner networks provide a platform for policy-makers, officials and other practitioners (e.g., prosecutors, judges, civil society leaders and experts) to share experience in the development and implementation of environmental policies and practices. While each network has a different mission, activities and organizational structure, all networks work in direct consultation with members to address specific country and regional priorities (see *Table 6*).

To assist decision-makers in understanding the potential benefits of establishing a practitioner network in Asia, representatives from the secretariats of international and regional networks joined the forum to share practical knowledge and experience in establishing and operating environmental compliance and enforcement practitioner networks. Network representatives emphasized the importance of collaborative exchange between member countries in policy development and capacity building activities, as well as between other networks and donors to leverage experience, capabilities and knowledge.

International Network for Environmental Compliance and Enforcement (INECE)

Mr. Kenneth Markowitz, INECE Secretariat

Founded in 1989, INECE is a global network dedicated to promoting effective compliance and enforcement of domestic environmental laws and international environmental agreements through networking, capacity building and cooperation. INECE is a partnership among government and non-government compliance and enforcement practitioners from over 100 countries.

INECE's mission is to: (1) raise awareness on the importance of environmental compliance and enforcement; (2) strengthen capacity for compliance and enforcement through training and issue analysis; and (3) develop networks for enforcement cooperation. INECE aims to raise awareness and disseminate information to practitioners through its website, workshops, conferences and newsletters. INECE promotes cooperation in target areas and helps strengthen regional networks worldwide.

Regulatory Environmental Programme Implementation Network (REPIN)

Ms. Angela Bularga, OECD Secretariat

REPIN was formed in 1999 to assist environmental enforcement authorities in Eastern Europe, Caucasus and Central Asia (EECCA), which faced significant environmental challenges. REPIN's objectives are to improve enforcement agencies and instruments based on best international practices and cost effectiveness, to transfer knowledge and skills, to re-shape relations between the agencies and regulated community, to develop effective environmental policies and legislation, and to stimulate international cooperation/harmonization and economic integration.

REPIN activities center on promoting development of environmental policy instruments, improving compliance assurance strategies and tools, and increasing performance of environmental enforcement agencies in member countries. To implement these activities, REPIN develops comprehensive studies, policy reports and tools; organizes specialized trainings and workshops to present practices and exchange experiences on prior-

ity areas; and implements pilot projects and disseminates information among all relevant stakeholders. REPIN's accomplishments include capacity building efforts for inspectors and development of guiding principles documents on environmental and permitting system reform initiatives, among many others.

Balkan Environmental Regulatory Compliance and Enforcement Network (BERCEN)

Mr. Mihail Dimovski, BERCEN Secretariat

Comprised of member countries in South Eastern Europe (SEE), BERCEN has been working since 2001 to facilitate, assist and promote enforcement of regulations by disseminating information and developing demonstration projects. BERCEN serves as a forum for exchanging best practices, fostering regional cooperation and improving overall enforcement within member countries.

To facilitate dialogue, BERCEN organizes study tours, peer reviews, train-the-trainer and exchange programs for environmental inspectors; develops assessments of existing enforcement programs; identifies priority areas for reform; and organizes annual plenary meetings for members to engage in strategic discussions about the network's activities and share lessons learned on compliance.

BERCEN's organizational structure consists of a secretariat and national coordinators. The secretariat plays a key role in managing and implementing program activities, while the national coordinators identify country priorities and work closely with the secretariat and country leaders to implement program activities. BERCEN closely coordinates with REPIN, IMPEL and INECE.

Key Recommendations for Launching a Network

In presenting their experience, representatives from REPIN and BERCEN offered key points for consideration by Asian decision-makers in launching a practitioner network. While the proposed network's mission, organizational structure and activities will depend on country and regional priorities and available resources, there are some key lessons to be learned from the European experience. Table 7 summarizes key recommendations for launching a network.

Table 7
Key Recommendations for Launching a Network

- Proceed from needs and clear objectives;
- Agree on a practical work program that focuses on specific products and results;
- Rely on strong stakeholder ownership and political commitment;
- Define clearly the responsibilities of key network participants, including the secretariat;
- Maintain a link to key decision-makers to ensure political support;
- Focus on human capacity development and commitment as main driving forces for change;
- Maintain strong stakeholder communication, including with the general public;
- Develop and apply indicators to measure progress and results; and
- Interact and cooperate with international networks and partners.

In sharing their experience, representatives from the three networks expressed their interest in continued cooperation and support in the creation of a practitioner network in Asia.

To gain insights into requirements and priorities for establishing a network in Asia, forum participants from China, India, Indonesia, Philippines, Sri Lanka, Thailand and Vietnam completed a questionnaire and joined facilitated discussions. Key topics of discussion included:

- Establishment of an Asian network,
- Objectives and activities,
- Priority program areas,
- Scope of implementation, and
- Organizational requirements.

Taken together, the results of these discussions form an action agenda for use by countries and donor partners in moving forward to establish the Asian environmental compliance and enforcement network.

Establishment of an Asian Network

As a key threshold issue, participants unanimously supported the establishment of a regional compliance and enforcement network for Asia. Participants agreed that a practitioner network would serve as a valuable resource for strengthening compliance with environmental requirements in their individual countries, and also provide a platform for addressing regional transboundary environmental challenges.

Objectives and Activities

Based on survey questions and discussions, participants identified three main objectives of the proposed environmental compliance and enforcement network:

- Promote the development and implementation of improved policies and institutions,
- Strengthen practitioner capacity, and
- Support regional sharing of best practices on compliance and enforcement.

To achieve these objectives, workshop participants identified potential network activities. Priority activities included in-country pilot projects to support formulation and development of new policies, regulations and procedures, as well as an annual forum that would facilitate sharing of best practices, experience and information. Table 8 provides a summary of potential network activities.

“Enforcement has become a top priority for Thailand, but also for our neighbors. Only by coming together as partners under a sustainable network can we share ideas and techniques that will enable each country to tackle our common challenges.”

Dr. Supat Wangwongwatana,
Deputy Director General,
Thailand Pollution
Control Department

Table 8
Network Objectives and Potential Activities

Objectives	Potential Activities
1. Promote the development and implementation of improved policies and institutions	<ul style="list-style-type: none"> • Pilot projects for new policies, regulations and procedures • Regional program assessments and studies • Performance indicator development and tracking • Regional guiding principles
2. Strengthen practitioner capacity	<ul style="list-style-type: none"> • Specialized practitioner trainings and tools • Performance indicator development and tracking • Peer exchanges
3. Support regional sharing of best practices on compliance and enforcement	<ul style="list-style-type: none"> • Annual forum • Peer exchanges • Website, publications and information databases • Linkages to other networks

To ensure the effectiveness of network activities, workshop participants agreed that the network must maintain a strategic focus that both targets country-specific needs and leverages regional experience. Emphasis in programming should be on developing and implementing innovative solutions that meet priority needs rather than creating a general networking platform with a broad mandate but limited capacity to ensure on-the-ground results.

Priority Program Areas

While priority program areas varied somewhat by country, participants identified the following priority areas for the network to target when developing projects and activities:

- Enforcement policies and authority;
- Institutional arrangements and decentralization;
- Compliance assurance (e.g., permitting and inspections);
- Self-monitoring, self-reporting, record-keeping;
- Public participation and economic instruments; and
- Indicators to evaluate agency performance.

These program areas correspond with common challenges identified in the country program assessments conducted in India, Philippines and Thailand.

Scope of Implementation

Participants confirmed that while network activities should focus primarily on improved implementation of domestic legal requirements, the network should also include activities that address transboundary pollution. In addition, the forum participants voiced the view that the network should not focus exclusively on urban and industrial environmental impacts, but, where practical, should include natural resources or coastal zone impacts and management.

Organizational Requirements

In discussions on establishing and operating an Asian practitioner network, participants identified four primary organizational requirements:

- Country membership,
- National coordinators,
- Executive committee, and
- Secretariat.

Country membership. Workshop participants recommended a membership structure where representatives from country environmental compliance and enforcement agencies would serve as the primary network members. While ministries would be official members, implementing departments could serve as the points of contact and program representatives.

Forum participants also voiced their support for involving other in-country stakeholders in network activities. Stakeholders could include related agency officials, judges, lawyers, civil society leaders and other experts.

National coordinators. The success of the network will depend on substantial commitments of time and resources by participating member countries, with differentiated responsibilities linked to available resources or level of program development. For countries where network partners will work closely to support formulation and development of new policies, practices and capabilities, participating member agencies should assign national coordinators to facilitate project and activity implementation.

Workshop participants also suggested that member countries should contribute not only to the development of their own programs and capabilities, but to those of counterparts. In particular, countries should host counterpart agencies through peer exchanges and transfer of information, as well as serve as mentors for particular program areas based on their comparative advantages and capabilities.

Executive committee. There was consensus on the need to establish an executive committee composed of country and donor representatives to guide the establishment and overall operations of the network. As a first task, an interim executive committee would be formed to develop the terms of reference for the network.

Once established, the network executive committee would oversee the development and implementation of annual work programs, as well as guide network sustainability. Members could serve on a rotating basis as set forth in the terms of reference.

Secretariat. To support implementation and coordination of network activities, participants agreed that the network should establish a secretariat. As with other networks, the secretariat would provide a central coordinating function between the executive committee, national coordinators, member countries and their stakeholders.

The secretariat would be responsible for working with partners to organize country and regional activities, support executive committee meetings, develop publications and tools, develop information management systems and track both network and country progress. The secretariat would also provide the focal point for coordination with other international and regional groups, including UNEP, ASEAN, APEC, SAARC, and other enforcement networks, such as INECE, REPIN, BERCEN and IMPEL.

Partner Commitments

Representatives from PCD, US-AEP, ADB and OECD made concluding remarks at the regional workshop, reaffirming their commitment to support the establishment of a regional environmental compliance and enforcement network.

Thailand Pollution Control Department

Dr. Supat Wangwongwatana, Deputy Director General

Workshop participants from seven Asian nations were unanimous in their support for establishing an Asian environmental compliance and enforcement network. Such consensus flowed naturally from two days of discussion on sharing international best practices and experience about environmental compliance and enforcement efforts, and on learning from the established networks of INECE, REPIN and BERCEEN.

An Asian network will fill an important need in the region and enable counterpart environmental agencies and practitioners to exchange best practices and strengthen compliance and enforcement. To move forward, participants must maintain long-term commitment and formulate a sustainable work plan.

United States-Asia Environmental Partnership

Mr. Winston Bowman, Regional Coordinator

US-AEP is proud to support the establishment of a regional enforcement network dedicated to bringing together countries to share experiences and best practices for improving compliance and enforcement in Asia. Discussions on the network's organization and operations were very thoughtful and productive with the proposal to have national coordinators representing each country, an executive or steering committee guiding the network work plan development and a secretariat implementing and coordinating regional activities.

Recognizing different country levels of progress on environmental enforcement and compliance, US-AEP believes that developing country-specific indicators can be an effective means for addressing differences and sharing experiences. Finally, the issue of sustainability should be addressed from the very outset of establishing this network.



Representatives from USAID, Thailand PCD and ADB offer concluding remarks. From left: Mr. Winston Bowman, Regional Coordinator, US-AEP; Dr. Supat Wangwongwatana, Deputy Director General, Thailand's Pollution Control Department; Mr. Mark Kasman, Environmental Management Specialist, Asian Development Bank.

Asian Development Bank

Mr. Mark Kasman, Environmental Management Specialist

ADB commends the efforts of participants and commits future funds to support the establishment and development of the proposed regional network. This gathering of participants from seven Asian nations and the resulting consensus to establish an enforcement network signals significant progress to improve environmental conditions in the region.

Organisation for Economic Co-operation and Development

Ms. Angela Bularga and Mr. Eugene Mazur, Environment Directorate

Based on our experience in launching and operating a practitioner network in the countries in the EECCA, OECD commends the decision by participants to establish their own network in Asia to share experiences and ultimately develop improved environmental policies, institutions and capacity. OECD is interested in working closely with Asian environmental practitioners and linking the proposed network activities with planned and future OECD compliance and enforcement activities in Asia. As a first step, OECD looks forward to building on this momentum by inviting participants to join a workshop on water quality management instruments in Japan in December 2004.

Next Steps: Developing an Asian Network

As a next step, partner countries, donor agencies and networks will work together to begin implementation of the proposed action agenda, including establishing an interim executive committee to guide development of the network terms of reference, and support planning of a launching workshop in 2005 in Manila. The interim executive committee will invite new member countries and other donor partners to join the Asian Environmental Compliance and Enforcement Network (AECEN).



Participants discuss strategies for establishing an Asian network on environmental compliance and enforcement.

REGIONAL WORKSHOP
ASIAN ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT FORUM:
Sharing International Experience on Environmental Compliance and Enforcement

Four Seasons Hotel, Pimarnman Room
Bangkok, Thailand
October 27-28, 2004

DAY I: WEDNESDAY, OCTOBER 27, 2004

- 8:30 – 9:00 **Registration**
- 9:00 – 9:10 **Opening Remarks**
- H.E. Mr. Petipong Pungbun Na Ayudhya
Permanent Secretary
Thailand Ministry of Natural Resource and Environment (MoNRE)
- 9:10 – 9:30 **Welcoming Remarks**
- H.E. Mr. Darryl N. Johnson
United States Ambassador to Thailand
- 9:30 – 10:00 **Keynote: Importance of Environmental Enforcement and Regional Cooperation**
- Hon. Mr. Justice Vijender Jain
Delhi High Court, India
- 10:00 – 10:30 Coffee Break
- 10:30 – 10:45 **Forum Objectives**
- Dr. Supat Wangwongwatana
Deputy Director General
Thailand Pollution Control Department
- 10:45 – 12:00 **Regional Enforcement and Compliance Program Challenges**
- Moderator: Ms. Jane Nishida, Senior Environmental Institutions Specialist
World Bank
- Thailand: Dr. Supat Wangwongwatana, Deputy Director General
Pollution Control Department
- Philippines: Mr. Luciano Hornilla, Regional Director
Department of Environment and Natural Resources, EMB Region 4-A

India: Dr. Dipankar Saha, Head, Agra Project Office
India Central Pollution Control Board

12:00 – 1:30 Lunch at Monthathip I Room (Ground Floor)

1:30 – 2:00 Guiding Principles of Reform of Enforcement Agencies

Mr. Eugene Mazur and Ms. Angela Bularga
Environment Directorate
Organisation for Economic Co-operation and Development (OECD)

2:00 – 3:30 Panel I: Permitting, Monitoring and Inspection Policies and Practices

Moderator: Mr. Davis Jones, Environmental Scientist, U.S. EPA

Thailand: Development of New Self-Monitoring and Self-Reporting Regulations
Mr. Burachatr Akkaraporn, Environmental Inspector
Pollution Control Department

Philippines: Use of Inspection Checklists for Strengthening Compliance
Monitoring and Enforcement
Mr. Virgilio Fabronero, Chief, Pollution Control Division
Department of Environment and Natural Resources, EMB Region 6

Discussion

3:30 – 3:45 Coffee Break

3:45 – 5:15 Panel 2: Strengthening Institutional Arrangements and Decentralization

Moderator: Ms. Angela Bularga, Environment Directorate, OECD

Sri Lanka: Regionalization of Central Environment Authority
Ms. Manel Jayamanna, Director General, Central Environmental Authority

China: Strengthening Provincial and Local Level Enforcement Capabilities
Mr. Chen Shanrong, Deputy Director General, State Environmental
Protection Administration

Discussion

5:15 – 5:30 Conclusion and Wrap-up
Dr. Supat Wangwongwatana, Deputy Director General, Pollution Control Department

DAY 2: THURSDAY, OCTOBER 28, 2004

8:30 – 8:45 Review of Day 1 and Overview for Day 2

Mr. Winston Bowman, Regional Coordinator, US-AEP

8:45 – 10:15 Panel 3: Enforcement Actions and Responses

Moderator: Ms. Mamie Miller, Office of Enforcement and Compliance, U.S. EPA

Philippines: Strengthening Enforcement Response in Laguna de Bay
Mr. Ceazar Natividad, Laguna Lake Development Authority, Department of
Environment and Natural Resources

India: Public Interest Litigation in India
Mr. Amarjit Singh Chandhiok, Sr. Vice President, Asia Pacific Jurist Association

- Discussion
- 10:15 – 10:30 Coffee Break
- 10:30 – 12:00 **Panel 4: Promoting Compliance Through Economic Instruments and Incentive Based Approaches**
- Moderator: Mr. Benoit LaPlante, Senior Environmental Economist, US-AEP
- Indonesia: Promoting Compliance through Public Disclosure
Mrs. Hermien Roosita, Assistant Deputy, Ministry of Environment
- Vietnam: Developing Vietnam's Pollution Charge System
Mrs. Nguyen Thi Kim Dzung, Ministry of Planning and Investment
- Discussion
- 12:00 – 1:30 Lunch at Ratana-Kosin Room (Second Floor)
- 1:30 – 2:00 **Strategies for Developing National and Regional Indicators: Measuring Performance of Compliance and Enforcement Programs**
- Mr. Kenneth Markowitz, INECE Secretariat
Ms. Mamie Miller, Office of Enforcement and Compliance, U.S. EPA
- 2:00 – 2:30 **Compliance and Enforcement Networks: Building Practitioner & Program Capacity**
- Mr. Kenneth Markowitz, INECE Secretariat
Ms. Angela Bularga, Environment Directorate, OECD/REPIN Secretariat
Mr. Mihail Dimovski, Program Manager, BERCEN Secretariat
- 2:30 – 3:45 **Small Group Discussions: Strategies for Developing an Asian Compliance and Enforcement Network**
- Facilitators: Mr. Kenneth Markowitz, INECE, and Mr. Mark Kasman, ADB
Mr. Eugene Mazur and Ms. Angela Bularga, OECD/REPIN
Mr. Mihail Dimovski, BERCEN, and Ms. Jane Nishida, WB
Mr. Davis Jones and Ms. Mamie Miller, U.S. EPA
- 3:45 – 4:00 Coffee Break
- 4:00 – 5:00 **Plenary Discussion: Report out Proposed Recommendations for an Asian Network**
- Moderators: Mr. Paul Violette, US-AEP
Mr. Kenneth Markowitz, INECE
- 5:00 – 5:15 **Conclusion and Wrap-up**
- Dr. Supat Wangwongwatana, Deputy Director General, Pollution Control Department
- 5:30 – 8:30 **Reception** at Ratana-Kosin Room (Second Floor)

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